

REMARKS:

Claims 31-45 were presented for examination and were pending in this application. In an Official Action dated January 8, 2008, claims 31-45 were rejected. Claims 31-33, 38-40, and 45 have been amended. Claims 1-30 were previously canceled. Applicants now request reconsideration and allowance of pending claims 31-45.

Response to Rejection Under 35 USC § 112, Paragraph 1

Claims 31-45 were rejected as failing to satisfy the enablement requirement. This rejection is respectfully traversed. The Examiner applied the factors mentioned in *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) for determining whether sufficient information existed regarding the subject matter of the claims so as to enable one skilled in the pertinent art to make and use the claimed invention and whether any necessary experimentation is “undue.”

In applying the *In re Wands* factors, Examiner states that it is unclear what is intended by the term “application verb.” However, Applicants respectfully submit that the term “application verb” is clear in the claims as amended. An application verb is defined in the claimed invention as “a transaction type within [an] application protocol.” See claims 31, 38, and 45. This definition is consistent with the description of an “application verb” provided in the specification. For example, page 4, lines 10-11 of the specification mention that “... and ‘application verb’ may include any specific application transaction or transaction type.” In the context of networked applications, an “application transaction type” and a “transaction type within an application protocol” are understood to be equivalent by one of ordinary skill in the art.

Further, the term “application verb” was known to one of ordinary skill in the art when the present application was filed. Examiner is referred to the attached Declaration of Venkatesh R. Iyer under 37 CFR 1.132 (“Declaration”). The term “application verb” is described in the 7-17-2001 INTERNET-DRAFT (included as Exhibit A of the Declaration) as “one of potentially many protocol operations that are defined by a particular application protocol.” (Declaration, Paragraph 10). The 7-17-2001 INTERNET-DRAFT further mentions that “an application verb is a transaction type, and may involve several PDU types within the application protocol (e.g., SNMP Get-PDU and Response-PDU).” (Declaration, Paragraph 10).

Examples of application verbs are provided in the 7-17-2001 INTERNET-DRAFT. For example, “user”, “pass”, and “act” are provided as examples of application verbs for the File Transfer Protocol (FTP) application protocol, and “get”, “head”, and “post” are provided as examples of application verbs for the Hypertext Transfer Protocol (HTTP) application protocol (Declaration, Paragraph 11).

The 7-12-2001 INTERNET-DRAFT was made publicly available on July 17, 2001 by the Internet Engineering Task Force (Declaration, Paragraphs 4, 5). The term “application verb” is also described in an Internet-Draft published in July, 2000, and is in Request For Comments (RFC) 3395 (Declaration, Paragraphs 13, 14). RFCs and Internet-Drafts are widely read and used by persons of ordinary skill in the field of computer networking (Declaration, Paragraph 7). Therefore, as of the filing date of the present application, a person of ordinary skill in the field of network analysis would have known and understood what an “application verb” is (Declaration, Paragraph 15).

Applicants now address Examiner's application of the *In re Wands* factors in the Office Action:

(a) **The breadth of the claims:** The claimed invention includes "identifying an instance of an application verb in the data packet, the application verb being a transaction type within the application protocol." As an example, an instance of the application verb "Get" for the SNMP application protocol is a Get-PDU or Response-PDU found in the packet (Declaration, Paragraph 10). The specification includes examples of identifying a HTTP Get request, for example at page 15, lines 12-17 and Figure 8. Applicant submits that the scope of the claims is clear and that it is possible to implement the claimed invention.

(b) **The nature of the invention:** The Examiner states that the definition of "application verb" is not clear. However, as discussed above, Applicant submits that an "application verb" in the context of an application protocol is understood to one of ordinary skill in the art.

(c) **The state of the prior art:** The Examiner states that the term "application verb" does not appear in the prior art. Applicant has provided multiple documents, referenced in the Declaration, including the term.

(d) **The level of one of ordinary skill:** As mentioned above, a person of ordinary skill in the field of network analysis would have known and understood what an "application verb" is (Declaration, Paragraph 15).

(e) **The level of predictability in the art:** Examiner stated that this factor was not applicable to this situation.

(f) **The amount of direction provided by the inventor:** Examiner stated that the Applicants "failed to provide adequate direction in what an application verb is, or how

application verbs are contained in network applications.” The claimed invention, as amended, recites that an application verb is a “transaction type within an application protocol.” Several examples of application verbs with this definition are provided in the Exhibits attached to the Declaration, as described above.

(g) **The existence of working examples:** No working examples have been provided to the Office.

(h) **The quantity of experimentation needed to make or use the invention based on the content of the disclosure:** As mentioned above, Applicant submits that the term “application verb” is clear and that sufficient examples are provided in the prior art and in the Specification to enable a person of ordinary skill in the art to make and use the invention.

Claims 32 and 39 were rejected as failing to satisfy the written description requirement. Examiner stated that “checking for retransmissions, out-of-sequence packets, errors, and complications – was not present in the specification as originally filed.” However, Applicants point to page 10, lines 21-24, and page 15, line 27 to page 16, line 2 of the Specification as disclosing these elements.

Based on the above remarks, Applicants respectfully submit that for at least these reasons, claims 31-45 satisfy the enablement and written description requirements under 35 USC § 112, Paragraph 1.

Response to Rejection Under 35 USC § 112, Paragraph 2

Claims 31-45 were rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. This rejection is respectfully traversed.

Examiner states that one of ordinary skill in the art cannot reasonably ascertain what Applicant intends by an “application verb.” However, as discussed above, a person of ordinary skill in the field of network analysis would have known and understood what an “application verb” is (Declaration, Paragraph 15). A definition and several examples of application verbs are provided in the 7-17-2001 INTERNET-DRAFT referenced above (Declaration, Paragraphs 10, 11). The description of an application verb provided in the present specification and claims is consistent with the definition and examples provided in the 7-17-2001 INTERNET-DRAFT (Declaration, Paragraph 12).

Based on the above remarks, Applicants respectfully submit that for at least these reasons, claims 31-45 are definite under 35 USC § 112, Paragraph 2.

Response to Rejection Under 35 USC 102(e)

Claims 31-45 were rejected under 35 USC §102(e) as allegedly being anticipated by U.S. Patent No. 6,839,751 (“Dietz”). This rejection is respectfully traversed. As amended, independent claim 31 recites a method for calculating application verb response times, comprising:

receiving a data packet containing data of an application protocol;
identifying an instance of an application verb in the data packet, the
application verb being a **transaction type within the application**
protocol;
updating a state machine based on the instance of the application verb,
the state machine comprising a current state of the application;
determining whether the instance of the application verb represents a
completed response based on the updated state machine, a
completed response being a response to a previous instance of the
application verb with no further response to the previous instance
of the application verb being expected; and
responsive to determining that the instance of the application verb
represents a completed response, **calculating a response time**
associated with the application verb between the previous

instance of the application verb and the instance of the application verb.

(emphasis added)

As can be seen, the claim recites identifying an instance of an application verb in a data packet, the application verb being a transaction type within an application protocol. For example, GET is an application verb (within the HTTP application protocol) for retrieving a resource such as the text of a web page. A GET-request or GET-response contained in a data packet are instances of the application verb. It is determined whether the instance of the application verb represents a completed response to a previous instance of the application verb and, if so, a response time between the current instance and the previous instance is calculated. The claimed invention beneficially allows for calculating the response times of application verbs to determine the performance of an application over the network for diagnostic or other purposes.

Independent claims 38 and 45 contain language similar to claim 31. All arguments regarding claim 31 presented below apply equally to claims 38 and 45.

The invention of claim 31 is not disclosed by Dietz. Dietz discloses a method for analyzing packet flows, including determining statistical metrics of packet arrival times. A flow in Dietz is determined merely by the packet source address, destination addresses, protocol (or application), and other transport layer information in the packet (Dietz, col. 10, lines 23-32). Dietz does not disclose calculating a response time associated with a transaction type within an application protocol, as in the claimed invention. Rather, Dietz is concerned with response times at lower layers of the protocol stack, such as transport-layer response times for a particular application.

Accordingly, Dietz does not disclose “responsive to determining that the instance of the application verb represents a completed response, calculating a response time associated with the application verb between the previous instance of the application verb and the instance of the application verb.” The Examiner cites Dietz, col. 7, lines 53-65, as disclosing all elements of claim 31. However, the cited portion merely discloses recognizing an application that generated a packet. The cited portion is not concerned with application verbs within an application protocol as in the claimed invention.

Based on the above remarks, Applicants respectfully submit that for at least these reasons, claims 31, 38, and 45, and dependent claims 32-37 and 39-44 are patentably distinguishable over Dietz.

Conclusion

In summary, it is respectfully submitted that all pending claims 31-45 are in condition for allowance. Favorable action is solicited.

Respectfully Submitted,
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